



COURSE SPECIFICATION

(Basics of Biology of Tumours (B))

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate Doctorate degree of Medical Oncology
(2) Department offering the programme.	Internal Medicine Department
(3) Department responsible for teaching the course.	Hematology Unit. Clinical Pathology department.
(4) Part of the programme.	First part
(5) Date of approval by the Department's council.	2/08/2016
(6) Date of last approval of programme specification by Faculty council.	9/8/2016
(7) Course title.	<u>Basics of biology of tumours (B)</u>
(8) Course code.	MONC 630
(9) Total teaching hours.	7.5 hours/15 weeks

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

1. Provide candidate with a basic knowledge in molecular biology necessary for an understanding of the life sciences at the molecular level in addition to basic principles of molecular biology techniques.

(2) Intended Learning Outcomes (ILOs):

A– Knowledge and Understanding

- A1. Describe the structure and function of the cell.
- A2. Discuss cellular growth and cell cycle durations.
- A3. Define the cellular apoptosis and its application.
- A4. List the secrets of cellular aging and individual senescence.
- A5. Report the significance of human genome project and the principles of gene therapy.
- A6. Describe cell cycle and its regulation, and point out how its dysregulation results in either apoptosis or carcinogenesis.
- A7. Recognize the causes and possible mechanisms of carcinogenesis, and how to screen, diagnose, and follow-up cancer by detection of tumor markers.

B–Intellectual skills.

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

- B1. Diagram the pathway of the angiogenesis and factors affecting it.
- B2. Propose potential targets in carcinogenesis pathway.

(3) Course content.

Subjects	Lectures	Clinical	Laboratory	Field	Total Teaching Hours
(1) Human Genome, Genomics & Proteionomics	1.5h				1.5h
(2) Genetic Counseling	1h				1h
(3) Molecular basis of Cancer	2h				2h
(4) Cell cycle Telomerase, telomere, Apoptosis, cell immortalization	1h				1h
(5) Angiogenesis, invasion and metastasis	1h				1h
(6) Cancer Stem Cells	1h				1h

(4) Teaching methods.

4.1. Power Point presentation.

(5) Assessment methods.

5.1. Written exam for assessment of A1–7, B1–2

5.2. MCQ exam for assessment of A1–7, B1–2

Assessment schedule.

Final exam 15th week

Percentage of each Assessment to the total mark.

Written exam: 80 marks. 80 % of total course exam.

MCQ exam: 20 marks :20% of total course exam.

(6) References of the course.

Text books:

6.1. Medicine, DeVita Cancer Principles and Practice of Oncology

6.2. Journals: Journal of Clinical Oncology

6.3. Journals: American Society of Hematology (ASH), European Hematology Association (EHA).

(7) Facilities and resources mandatory for course completion.

– Lecture Hall.

– Data show.

Course coordinator:

Prof. Dr. Sameh Shamaa

Prof. Dr. Tawfik Elkhodary

Dr. Ziad Emarah

Head of the department:

Prof. Dr. Salah El-Gamal

Date of First Approval: 22/12/2010

Date of Last Approval: 23/08/2016